ABSTRACT

Convenient techniques for discriminating the base type in a base sequence of a nucleic acid are provided. The technique includes the step (a) of preparing a sample solution containing a nucleic acid, a primer having a base sequence that includes a complementary binding region which complementarily binds to the nucleic acid, and a nucleotide; the step (b) of allowing the sample solution to stand under a condition to cause an extension reaction of the primer, and producing pyrophosphate when the extension reaction is caused; the step (c) of bringing the sample solution into contact with the front face of a H^+ hardly permeable membrane having H^+-pyrophosphatase, which penetrates from front to back of the membrane, of which active site that hydrolyzes pyrophosphate being exposed to the front face; the step (d) of measuring the H^+ concentration of at least either one of the solution at the front face side of the H^+ hardly permeable membrane or the solution at the back face side of the H^+ hardly permeable membrane, in a state where the H^+-pyrophosphatase is immersed in the solution; the step (e) of detecting the extension reaction on the basis of the result of measurement in the step (d); and the step (f) of discriminating the base type in the base sequence of the nucleic acid on the basis of the result of detection in the step (e).